

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
1 September 2005 (01.09.2005)

PCT

(10) International Publication Number  
**WO 2005/079523 A3**

(51) International Patent Classification:

A61K 38/00 (2006.01) C12N 15/11 (2006.01)  
C07K 14/00 (2006.01) G01N 33/53 (2006.01)  
C07K 16/00 (2006.01)

(74) Agent: COLEMAN, Henry, D.; Coleman Sudol Sapone,  
P.C., 714 Colorade Avenue, Bridgeport, CT 06605-1601  
(US).

(21) International Application Number:

PCT/US2005/005398

(22) International Filing Date:

18 February 2005 (18.02.2005)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

US60/545,370 18 February 2004 (18.02.2004) US  
US60/623,909 1 November 2004 (01.11.2004) US

(71) Applicant (for all designated States except US): UNIVER-  
SITY OF GEORGIA RESEARCH FOUNDATION,  
INC. [US/US]; Boyd Graduate Studies Research Center,  
The University of Georgia, Room No. 633, Athens, GA  
30602-7411 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): EVANS, Donald,  
L. [US/US]; 295 Greystone Terrace, Athens, GA 30605  
(US). KAUR, Harjeet [IN/US]; 200 N. Foliage Cir.,  
Cary, NC 27511 (US). JASO-FRIEDMANN, Liliana  
[UY/US]; 1020 Tybee Trace, Athens, GA 30606 (US).  
LEARY, John, H., III [US/US]; 174 Talmadge Street,  
Apt. 8, Athens, GA 30605 (US). PRAVEEN, Kesavan-  
nair [IN/US]; 300 Rogers Road, Apt. R-308, Athens, GA  
30605 (US).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY,  
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,  
ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SI, SZ, TZ, UG, ZM,  
ZW); Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,  
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,  
GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report  
— before the expiration of the time limit for amending the  
claims and to be republished in the event of receipt of  
amendments

(88) Date of publication of the international search report:

4 October 2007

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: NOVEL TELEOST DERIVED ANTIMICROBIAL POLYPEPTIDES

(57) Abstract: The invention is directed to an isolated polypeptide which (a) is obtainable from a teleost; (b) has antimicrobial activity; (c) binds to oligoguanosine and/or CpG (SEQ ID NO:7); (d) comprises 58 strongly basic amino acids selected from the group consisting of K and R; (e) comprises 50 hydrophobic amino acids selected from the group consisting of A, I, L, F, W and V; (f) comprises 50 polar amino acids selected from the group consisting of N, C, Q, S, T and Y and (g) contains 11 lysine-rich motifs and antimicrobial fragments thereof as well as methods for preparing said polypeptides, compositions and libraries comprising said polypeptide(s) and uses of said polypeptide(s), particularly in treating microbial infections. The invention is further directed to a nucleic acid(s) encoding said polypeptide, microarrays comprising said nucleic acid(s) and uses for said nucleic acid(s). Furthermore, the invention is directed to an antibody which binds to the polypeptide of the present invention and uses for said antibodies.

WO 2005/079523 A3